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ABSTRACT

An extensive Elementary and Secondary Education Act (ESEA) Title I data base was developed in order to study the distribution and effect of Title I funds in New Jersey. The information in this data base was then analyzed in conjunction with information concerning reading and mathematics achievement, program adoption, and demography, to determine correlations with ESEA Title I programs. The following conclusions were drawn from the analysis: (1) Those school districts with higher average staff Title I salaries usually reported poorer performing students in both reading and mathematics. (2) Those districts with a larger ratio (more students per instructor) were the poorer performing districts. (3) Those schools allotting more time per student per instructor for Title I instruction were the better performing schools. (4) There was generally no association between achievement and number of compensatory education programs adopted. (Author/MV)

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Occasional Papers in Education

NEW JERSEY STATE DEPARTMENT OF EDUCATION

DIVISION OF RESEARCH, PLANNING AND EVALUATION

AN ANALYSIS OF TITLE I DATA IN NEW JERSEY

BY:

STEPHEN L. KOFFLER

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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DEPARTMENT OF EDUCATION
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TRENTON, N. J.

OFFICE OF THE COMMISSIONER

Dear Colleague:

We have selected "An Analysis of ESEA Title I Data in New Jersey" as the second publication in the R.P.& E. "Occasional Paper" Series.

The effect of the distribution and usage of Title I funds is of prime concern to everyone in the educational community, especially with the enactment of programs in New Jersey such as the "Thorough and Efficient" Education Act, the State Compensatory Education Act, and the Minimum Competencies Act. We must look to the components of the Title I programs and integrate them where possible with our education system.

We hope you find this research paper informative and thought provoking.

Cordially,

Fred G. Burke
Commissioner

FOREWORD

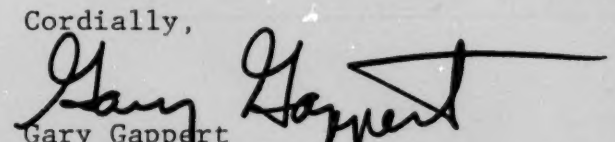
The second publication of the "Occasional Papers in Education" series focuses upon the federally funded ESEA Title I compensatory education programs in existence in many school districts in New Jersey during the 1975-76 academic year.

This publication, titled "An Analysis of ESEA Title I Data in New Jersey," and the research it is based upon are a result of a grant awarded to the New Jersey Department of Education in 1976 by the National Insitute of Education. The purpose of the grant award was to: 1) develop a comprehensive datbase containing all pertinent ESEA Title I information in New Jersey for the 1975-76 academic year; and 2) from that database, in conjunction with other relevant data, examine the relationship between concentration and services of ESEA Title I programs in the state.

There are certain caveats to the research which must be considered. First, the study was primarily a correlational analysis of the data; we must not lose sight of the principle that correlation does not imply causation, only that a relationship exists. Second, the interpretation of the analysis of data in this study does not constitute a comprehensive evaluation of the effectiveness of the particular ESEA Title I programs. The research presented in this publication provides a limited evaluation of ESEA Title I. I encourage other evaluations relating to the effectiveness of these programs.

This analysis of ESEA Title I data in New Jersey was facilitated by the cooperation, assistance and expertise of Mr. Joseph Moore, Director of ESEA Title I in New Jersey and his entire staff. Both Joe Moore and I welcome your comments and reactions to this research study.

Cordially,



Gary Gappert
Assistant Commissioner
Research, Planning and
Evaluation

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SUMMARY

Title I of the Elementary and Secondary Education Act of 1965 was enacted ..."to provide financial assistance to Local Educational Agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means which contribute particularly to meeting the special education needs of educationally deprived children."

New Jersey received for fiscal year 1975-76 approximately $49 million to be used for ESEA Title I projects. Presently, little is known concerning the distribution, and particularly the effect of the dispersal and usage of these Title I funds on educational achievement. To address these problems, an extensive New Jersey ESEA Title I database for 1975-76 was designed and developed.

The information in this database was then analyzed in conjunction with databases containing information concerning reading and mathematics achievement, program adoption/adaption, and demographics to determine relationships involving ESEA Title I.

The following conclusions were drawn from the analysis.

1. Those LEAs with higher average staff Title I salaries were usually the ones with the poorer performing students in both reading and mathematics.

2. Those LEAs with a larger ratio (i.e., less instructors to serve the students) were the poorer performing

LEAs. This result when taken in context with the achievement-salary per instructor correlation, may indicate that those LEAs with a small, but well paid Title I staff, are not adequately meeting the students needs. There should be a larger staff, resulting in a smaller student-instructor ratio.

3. The generally positive association between achievement and time spent per instructor in Title I instruction indicates that those schools allotting more time per student per instructor for Title I instruction were the better performing schools. The results indicate that perhaps more time allotted for these additional reading and mathematics programs could result in increased mastery levels for the students.

4. Except for isolated instances, there was no association between achievement and number of programs adopted/adapted. This may, however, be an artifact of the data. There was not a large variability between achievement and number of programs, which may cause spurious correlations.

5. It is important to note all of the data obtainable from the ESEA Title I applications were examined; conclusions drawn were based solely on the analysis of the available data. It is apparent that the Title I applications do not address all areas for analyses of ESEA Title I.

This study analyzed the existing data in both a descriptive and correlational manner. It must be remembered that correlation does not imply a causation, only that a relationship exists between certain entities.

INTRODUCTION

Title I of the Elementary and Secondary Education Act of 1965 was enacted "...to provide financial assistance to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means which contribute particularly to meeting the special education needs of educationally deprived children." Each eligible local educational agency (LEA) is required to apply to the state educational agency (SEA) for the financial assistance, and, in so doing, is also required to describe to the SEA the manner by which it will "expand and improve (its) educational program." The SEA is required to review the application of each LEA for the purpose of determining that the program described within the application complies with Federal and state legal requirements. The purpose of these guidelines is to assist each eligible LEA in its efforts to design sound educational programs that will meet the needs of educationally deprived children that are in compliance with both Federal and state regulations. (NJ Dept. of Education, 1976)

ELEMENTARY AND SECONDARY EDUCATION ACT
OF 1965

Title I - Financal assistance to local educational agencies for the education of children of low-income families.

DECLARATION OF POLICY

Sec. 101. In recognition of the special educational needs of children of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs, the

> Congress hereby declares it to be the American policy of the United States to provide financial assistance (as set forth in the following parts of this title) to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means (including preschool programs) which contribute particularly to meeting the special educational needs of educationally deprived children.
>
> (20 U.S.C. 241a) Enacted April 11, 1965, P.L. 89-10, Title 1, sec. 2, 79 Stat. 27; redesigned and amended January 2, 1968, P.L. 90-247, Title I secs. 108(a), 110, 81 Stat. 786, 787; amended April 13, 1970, P.L. 91-230, sec. 113 (b).

GENERAL GUIDELINES

The law itself and the criteria developed for Title I by the Office of Education included some basic principles which must be followed in planning a Title I project.

The law (compilation, section 141) says:

1. Projects must meet the special educational needs of educationally deprived children in school attendance areas having high concentrations of children from low-income families.

2. Projects must be of sufficient size, scope, and quality to give reasonable promise of substantial progress toward meeting those needs.

A Title I program should be part of an overall compensatory education program involving the use of resources from a number of programs and agencies.

The Title I program should support the regular school program and, where necessary, change it.

Most children who are educationally deprived are not responding positively to the regular school program. The Title I program should not only help these children overcome their learning problems, it should also support changes in the regular school program, making it more responsive to student needs. The regular school program, the Title I program, and any other special school programs should be planned together as a total educational package.

GENERAL ELIGIBILITY OF CHILDREN

Basically, there are two criteria a child must meet to participate in a Title I program:

1. He must live in the Title I attendance area. This does not mean he must attend the public school where Title I services may be offered; but he must be a resident of the area served by the public school.

2. He must be educationally deprived. Most school districts consider a child educationally deprived if he is performing below the expected grade level for his age group.

COMPARABLE SERVICES

No matter what services a Title I program provides for educationally deprived children, they will not be enough to help these children overcome their learning problems if they are not extra services. Title funds are meant to be used in addition to State and local funds, not instead of them.

This was always the intent of Title I, but because some schools usually received less services from State and local funds than other schools in the same district, the Federal Government has made its rules on providing equal or similar services to children in Title I and nonTitle I schools stronger and more clear.

The first regulations issued about Title I stated that this Federal money should be used to supplement and not supplant State and local funds. Supplement means on top of or in addition to; supplant means to replace or instead of.

PARENT PARTICIPATION

Parental involvement at the local level is deemed to be an important means of increasing the effectiveness of programs under Title I of the Act.

The regulations for the Act further emphasize the value of parental participation Reg. 116.16 (0) (2) (vi):

> "that the Title I program in each project area includes specific provisions for informing and consulting with parents concerning the services to be provided for their children under Title I of the Act and the ways in which such parents can assist their children under Title I of the Act and the ways in which such parents can assist their children in realizing the benefits those services are intended to provide."

PARENT ADVISORY COUNCILS

Section 141 (a) (2) requires that the local educational agency shall establish an advisory council for the entire school district and shall establish an advisory council for each school of such agency served by a program or project assisted under section 143 (a) (2), each of which advisory councils:

> "(A) has as a majority of its members parents of the children to be served,
>
> (B) is composed of members selected by the parents in each school attendance area.
>
> (C) has been given responsibility by such agency for advising it in the planning for, and the implementation and evaluation of, such programs and projects, and
>
> (D) is provided by such agency, in accordance with regulations of the Commissioner, with access to appropriate information concerning such programs and projects."

PROGRAMS AND PROJECTS

Programs for which assistance is requested shall be concentrated on a limited number of projects related to a limited number of educationally deprived children so as to give reasonable promise of success.

Each application by a local educational agency for a grant must propose projects of sufficient size, scope and quality as to give reasonable promise of substantial progress toward meeting the special educational needs of educationally deprived children for whom the projects are intended. The projects must be developed in the instructional areas of language experience and computational skills.[1] In addition, there are programs in Non-Standard English and kindergarten/pre-kindergarten.

The budget for a project shall avoid imprudent, extravagent or wastful expenditures which would tend to defeat the intent of the Act to meet the educational needs of educationally deprived children. The project application must justify any proposed expenditures above the level of expenditures by the applicant for other comparable activities. (NJ Department of Education, 1976.)

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[1]Language Experience programs include all types of reading programs (reading, oral, reading readiness, Language Development, etc.) through any LEA established method. Computation Skills program include all types of mathematics programs established by the LEA.

New Jersey received for fiscal year 1975-76 approximately $49 million to be used for ESEA Title I projects. Presently, little is known concerning the distribution and particularly the effect of the dispersal and usage of these Title I funds on educational achievement, especially in terms of high concentration of federal monies and programs.

To address these problems, an extensive New Jersey ESEA Title I database for 1975-1976 was designed and developed. This database was then used in conjunction with other existant databases to determine the effect of the Title I program. The project consisted of two distinct segments: 1) data collection and 2) analysis and presentation of the information.

DATA COLLECTION

Each fiscal year, LEAs who are applying for ESEA Title I funds are required to submit to the New Jersey Department of Education an extensive and detailed application form. The Title I database was developed from information contained in these applications.

From the application form for FY 1975-1976, two types of coding sheets were developed--one for district wide information and one for school information within the district. (The coding sheets and an instruction sheet appear in Appendix A).

The following information was obtained from the FY 1975-1976 title I applications:

A. District

1. County Name
2. District Name

3. Total expenditures FY 1973-1974

4. Total expenditures FY 1974-1975

5. Federal funds FY 1973-1974

6. Federal funds FY 1974-1975

7. Average daily attendance FY 1973-1974

8. Average daily attendance FY 1974-1975

9. Total Title I participants

   a. public schools

   b. private schools

   c. Neglected & Delinquent institutions (N&D)

10. For each program (Language Experience, Computational Skills, Non-Standard English, Kindergarten/Pre-Kindergarten).

   a. grade levels served

   b. number of public school participants

   c. number of private school participants

   d. number of N&D participants

   e. total participants

   f. number of full-time professionals

   g. number of part-time professionals

   h. number of full time non-professionals

   i. number of part time non-professionals

   j. cost of the program

   k. for each grade

      1. district standard

      2. eligible students

      3. number above standard

      4. number below standard

      5. number NSE

      6. number eligible to participate

7. number selected to participate

11. Is the Title I program a cooperative program among a number of LEA's? If so, which LEAs are involved and how many students from each participating LEA.

12. Grade Span, number of schools, and number of residing students in own LEA, other LEAs, private schools, and N&D institutions.

13. Number of students not enrolled in any school but eligible for Title I programs.

14. Source of data used for determining the number of children from low-income families (Aid for Dependent Children, Free School lunch, etc.)

15. Number of attendance areas.

16. Number of children from low income families.

17. Number eligible students (public, private, N&D).

18. Non-standard English enrollment (public, private, N&D).

19. Number of types of supportive services and enrollment (public, private, N&D).

20. Type of application

    a. basic grant or special incentive grant

    b. regular school term, summer school, total

    c. impounded, carryover, or current year's funds

21. LEA budget

    a. administration

    b. instruction

    c. operation

    d. maintenance

    e. fixed charges

    f. student activities

    g. other expenses

22. Title I salaries for each program.

23. Neglected & Delinquent Institutions (number and enrollment, title I participation, staff)

24. Kindergarten, Pre-school (number of participants)

B. School

1. School Name

2. District Name

3. Unduplicated Title I participants by grade

4. For each program (Language Experience, Computational Skills, NSE & Pre-Kindergarten/Kindergarten)

a. number of professional staff

b. number of non-professional staff

c. participating children (public, non-public, N&D)

d. number of days per week program is in operation

e. minutes per week per student

f. does program function during school hours?

g. does program function after school hours?

Eight people performed the task of transferring the necessary information from the Title I application to the district and school coding sheets. The task required 378 man-hours to complete. In total 462 district coding sheets and 1557 school coding sheets were completed.

Once the coding process was completed, the forms were keypunched and verified, and then developed into two operational databases, one for district information and one for school information.

These databases were then merged with the following existent Department of Education databases.

1. 1975 New Jersey Educational Assessment Program

Annually, all students in grades 4, 7, and 10 (and every three years in grade 12) are administered a criterion-referenced instrument in reading and mathematics. This

database contains the school level and district level results of the 1975 instruments for grades 4, 7, 10 and 12.

2. Federal Programs Disseminated in New Jersey

This database contains the number of disseminated projects adopted/adapted by each LEA in eleven categories: mathematics, reading, special education, classroom management, humanities, other, career education, affective education, alternaive schools, education management, and early childhood.

3. District Demographic Database

Based on information from the 1970 census, a measure of the socioeconomic status (SES) of the LEAs was determined.

To obtain this measure of the socioeconomic background of the school district, a factor analysis was performed on a series of 1970 census variables known to contribute to a district's socioeconomic status. The type of factor analysis used was an iterative principle component analysis with a varimax rotation.

There were eight variables used in the factor analysis:

1. The education level of males and females 25 years old and older.
2. The occupation level of males and females 25 years old and older.
3. Average family income.
4. Percent of persons living in the same housing unit for at least the past ten years (mobility).
5. Number of people per housing unit (density).
6. Percent urban population of the district.
7. Percent of experienced unemployed males and females 16 years old and older.

8. Percent of families below the poverty level.

The factor analysis determined two significant factors. Based on the interpretation of the significant factors, the first factor was determined to be a measurement of socioeconomic status.

A factor score was then generated for each of the LEAs included in the analysis. The districts were ranked according to their factor score and cut-points were established to divide the districts into 10 District Factor Groups (DFG). The cut-points were determined so that all District Factor Groups would be comprised of approximately the same number of LEAs. The DFGs range from A, the lowest SES group, to J, the highest. In addition, DFG V contains all Vocational-Technical schools districts and DFG Z contains all school districts for which no 1970 census information was available (and hence, no SES determination attainable.

This database contains the DFG for each LEA as well as the type of community in which the LEA lies - (urban center, urban-suburban, suburban, suburban-rural, rural, rural-center-rural, vocational and regional).[2]

[2] A definition of each community type appears in Appendix B.

DATA ANALYSIS AND PRESENTATION

A. District

Of the 589 operating school districts in New Jersey, 462 (78.4%) received funds for ESEA Title I programs. Table I illustrates the number of operating districts and Title I districts by county, and the percent of LEAs per county participating in ESEA Title I programs. Tables 2 and 3 present the same information by SES and community type. Most of the low and middle SES districts are Title I districts. In addition all of the regional and most of the urban LEAs participate in Title I programs.

All of the Title I FY 1974-75 applications were for the basic grant. Most of the applications (441 or 95.5%) were for the Regular School year for current FY funds.

The selection of eligible students for participation in ESEA Title I programs is a two-step procedure. First public school attendance areas are selected as eligible based upon the number (percent) of children from low-income families in that area. Then individual students are selected as eligible based on educational need.

The majority of districts based their criteria for selection of eligible attendance areas for ESEA Title I funds on Aid for Dependent Children (456 or 98.7%). The Free Lunch Program was used by 59 LEAs (12.8%); School Survey by 20 (4.3%); Health Statistics by 13

TABLE 1

NUMBER OF ESEA TITLE I
NEW JERSEY PUBLIC SCHOOL DISTRICTS
BY COUNTY

County	Number of LEAs		Percent (By County) of ESEA Title I School Districts
	Operating	ESEA TITLE I	
Atlantic	25	21	84%
Bergen	75	50	66.7
Burlington	45	37	82.2
Camden	38	38	100.0
Cape May	17	13	76.5
Cumberland	15	11	73.3
Essex	22	15	68.2
Gloucester	28	25	89.3
Hudson	14	12	85.7
Hunterdon	29	19	65.5
Mercer	10	7	70.0
Middlesex	25	24	96.0
Monmouth	52	43	82.7
Morris	41	29	70.7
Ocean	28	22	78.6
Passaic	20	18	90.0
Salem	14	11	78.6
Somerset	19	15	79.0
Sussex	25	20	80.0
Union	23	14	60.9
Warren	24	18	75.0
Total	589	462	78.4

Table 2

Number of Operating and Title I Districts

by Socioeconomic Status[1]

SES	Operating Districts	Title I Districts	Percent of Title I Districts
Low (DFG A-C)	150	142	94.7%
Middle (DFG D-G)	191	171	89.5
High (DFG H-J)	149	98	65.8
Total	490	411	83.9

[1]The number of operating and Title I districts is not the same for Tables 1 and 2 because not all districts are categorized into SES levels. The determination of the socioeconomic groups has been explained previously. The three lowest SES groups (DFG A, B, and C) comprise the low SES group, the four middle SES groups (DFG D, E, F, and G) comprise the middle SES group; the three highest SES groups (DFG H, I, and J) comprise the high SES group.

Table 3

Number of Operating and Title I Districts

by Community Type[2]

Community Type	Operating Districts	Title I Districts	Percent of Title I Districts
Urban	154	142	92.2%
Suburban	207	146	70.5
Rural	155	123	79.4
Vocational	20	3	15.0
Regional	48	48	100.0
Total	584	462	79.1

[2]The number of operating districts is not the same for Tables 1 and 3 because not all districts are categorized into community type.

(2.8%); United States Census, 12 (2.4%); employment statistics 2, (0.4%); Housing Statistics 1 (0.2%), and other, 14 (3.0%).[3]

As previously mentioned, there are four types of Title I programs: Language Experience, Computational Skills, Non-Standard English, and Pre-Kindergarten/Kindergarten. Of the 462 Title I districts 411 (89.0%) used funds for Language Experience Programs, 156 (33.8%) had Computational Skills programs, 68 (14.7%) had Non-Standard English programs and 146 (31.6%) had Pre-Kindergarten/ Kindergarten programs. Further, of the districts having Language Experience and Computational Skills programs 282 (61.0%) had only Language Experience programs, 27 (5.8%), only Computational Skills programs and 129 (27.9%), both Language Experience and Computational Skills. Table 4 presents the number (and percentage) of LEAs having particular programs, by SES and Community type.

Because of the nature of the Title I projects, the remainder of the results will be discussed by program.

Language Experience

Table 5 presents the total public school, non-public

[3] LEAs may use a combination of data sources. Hence, the total is more than the 462 LEAs.

TABLE 4

NUMBER OF LEAS PER PROGRAM
BY SES AND COMMUNITY TYPE[1]

SES	Language Experience	Computational Skills	Non-Standard English	Pre-Kindergarten/ Kindergarten
Low	135 (32.9%)	46 (29.5%)	41 (60.3%)	53 (36.3%)
Middle	156 (38.0%)	65 (41.7%)	13 (19.1%)	47 (32.2%)
High	73 (17.8%)	34 (21.5%)	11 (16.2%)	39 (26.7%)

Community Type	Language Experience	Computational Skills	Non-Standard English	Pre-Kindergarten/ Kindergarten
Urban	130 (31.6%)	56 (35.9%)	44 (64.7%)	69 (47.3%)
Suburban	122 (30.0%)	48 (30.8%)	14 (20.6%)	45 (30.8%)
Rural	111 (27.0%)	30 (19.2%)	7 (10.3%)	27 (18.5%)
Vocational	3 (0.1%)	1 (0.1%)	0 (0.0%)	0 (0.0%)
Regional	45 (11.0%)	21 (13.5%)	3 (4.4%)	5 (3.4%)

[1]The percentages in the table refer to the percentage of those LEAs participating in each program. (i.e., 32.9% of all LEAs participating in Language Experience Programs are low SES districts.) Because not all districts are categorized into SES groupings, the total percentage does not equal 100%. The total does, however, sum to 100% for the breakdown by community type.

TABLE 5

Language Experience Participation, Staffing and Cost

SES	Public Students	Non-Public Students	ND Students	Total Students	Cost	Prof. Staff	Non-Prof. Staff	Cost Per Student	Students Per Prof. Staff	Students per non-prof. Staff	Salary	Salary Per Staff Member
Low	44,067	6,036	395	50,498	$15,022,000	1,134	1,100	$297.48	44.53	45.91	$12,572,000	$5,627.57
Middle	12,535	1,469	39	14,043	4,689,000	514	425	333.90	27.32	33.04	3,458,000	3,682.64
High	4,495	561	1	5,057	1,386,000	248	118	274.08	20.39	42.86	1,072,000	2,928.96
Voc.	432	21	0	453	127,000	7	12	280.35	64.71	37.75	118,000	6,210.53
No SES	900	38	6	944	241,000	51	12	255.30	18.51	78.67	169,000	2,682.54
Total	62,429	8,125	441	70,995	21,465,000	1,954	1,667	302.35	36.33	42.59	17,389,000	4,802.26

SES	Percent of Public Participants	Percent of Non-Public Participants	Percent of N&D Participants	Percent of Total Participants
LOW	65.4%	75.6%	89.0%	66.6%
MIDDLE	78.3	84.4	24.7	78.5
HIGH	62.9	70.5	1.6	63.2
VOCATIONAL	75.5	56.8	0.0	74.4
NO SES	83.3	100.0	0.0	82.4
TOTAL	67.7	76.7	64.0	68.6

school and Neglected and Delinquent (N&D) students participating in this program, the percent of Title I students participating, as well as the cost of the program, per pupil cost, professional and non-professional staff and number of students per staff member for each SES level. In total, 70,995 children participated in language experience programs utilizing 1954 professional and 1667 non-professional staff members at a total cost of $21,465,000. There were 36.33 students per professional staff member and 42.59 students per nonprofessional staff member at a cost of $303.13 per student.

In total, $17,389,000 was spent for salaries for Language Experience programs. Considering a total of 3621 instructional people, this amounts to $4,802.35 in salary per instructional person. Overall, 68.6% of the Title I students participated in Language Experience Program.

To assess interconnections between ESEA Title I involvement, educational achievement, and reading projects adopted/adapted, certain correlational relationships were analyzed.

The program dissemination criterion was the number of reading programs adopted/adapted by the LEAs. The educational achievement criteria was based on an aggregated score from the New Jersey Educational Assessment Program's 1975 Statewide reading instrument, administered to all public school students in grades

4, 7, 10 and 12 in October, 1975. The instruments are criterion referenced tests measuring basic skill concepts in reading.

The Title I variables analyzed were cost of language experience program per student, average instructional salary, number of students per instructional staff, and percent Title I participants (of the total district enrollment).

To control for the relationship between socioeconomic status and educational achievement, all analyses were performed within SES groupings. Further, not all districts have a fourth, seventh, tenth, and twelfth grade. Additionally, most of the Title I districts did not service students in all grades (kindergarten through twelve). Therefore, the analyses were performed only for those districts having the particular grade and also servicing that grade in its ESEA Title I program.

The relationship between Title I, adopted programs and educational achievement varied according to the socioeconomic levels of the participating LEAs.

Of the 411 districts who had language experience programs, 352 LEAs (85.7%) serviced students who took the fourth grade 1975 NJEAP instrument. The correlation coefficients for the Title I, adopted programs, and NJEAP data appear in Table 6[4]. For the

[4]Correlations for Computational Skills are also included in Table 6. The Computational Skills information will be discussed in that section.

TABLE 6

FOURTH GRADE CORRELATIONS BETWEEN ESEA TITLE I,

EDUCATIONAL ACHIEVEMENT AND PROGRAMS ADOPTED/ADAPTED

SES	Reading Test	Math Test	Reading Programs	Math Programs
Low				
Cost per student	-0.172*	-0.203	0.143	0.120
Salary per instructor	-0.027	-0.012	0.089	0.083
Students per instructor	-0.0006	-0.295*	0.036	0.158
Percent Enrolled Students in Program	-0.513**	-0.296*	—***	—***
Middle				
Cost per student	0.026	-0.130	-0.063	0.139
Salary per instructor	-0.260*	-0.198	-0.058	0.525*
Students per instructor	-0.168*	-0.013	0.068	0.408*
Percent Enrolled Students in Program	-0.274*	0.010	—***	—***
High				
Cost per student	0.053	0.117	-0.233	0.360*
Salary per instructor	-0.362*	-0.204	-0.034	0.270
Students per instructor	-0.382*	-0.233	0.171	0.176
Percent Enrolled Students in Program	-0.288*	0.027	—***	—***

*significant p<.05
**significant p<.01
***not done; see explaination in text.

low SES districts, the NJEAP result was significantly negatively correlated ($p<.05$) with the per pupil cost of the Language Experience program. Therefore, as the per pupil cost of the program increased, the average district reading assessment score decreased. Additionally, there was a significant negative correlation between the NJEAP and the percent of enrolled students participating in the program. This result indicates that those LEAs with a greater majority of participation in Title I programs had lower achievement levels. That this relationship is true is intuitive because the selection process of eligible students for Title I is based on education levels. There were not significant relationships involving the Title I variables with number of reading programs.

For both the middle and high SES groups of districts there were different relationships present. For both groups the NJEAP reading aggregated score was significantly negatively correlated ($p<.05$) with both salary per instructor, number of students per instructor, and percent of enrolled students participating.

In general, these results tend to suggest that there was a negative relationship between Title I related variables and the average educational achievement of the LEAs. The results indicate that those districts which have large pupil-teacher ratios and large per instructor average salaries are performing poorest. This result might infer that by increasing the number of staff

members involved in Title I programs for Language Experience, the educational attainment of students in those districts may increase.

There was no relationship between Title I and the number of reading programs adopted/adapted by the LEA.

The results based on the relationships concerning number of programs disseminated may be an artifact of the data, rather than a valid relationship. The number of programs adopted/adapted did not vary considerably among districts throughout the state (i.e., the range of programs adopted/adapted is small). Therefore, since the correlational relationships are highly dependent upon the variations of the variables involved, the correlation coefficients concerning the programs adopted/adapted may be spurious[5].

Only 45 of the 411 districts (10.9%) serviced students who were administered the 7th grade NJEAP reading instrument. Table 7 presents the correlation coefficient for the various data items[6]. Because of the small numbers of LEAs in each SES category, non-parametric Spearman rank order correlations was used in place of the more customary Pearson Product Moment correlations.

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[5] The larger the variability, the more stable and meaningful the correlation coefficient will become.

[6] Correlations for Computational Skills are also included in Table 7. The Computational Skills information will be discussed in that section.

TABLE 7

SEVENTH GRADE CORRELATIONS BETWEEN ESEA TITLE I,

EDUCATIONAL ACHIEVEMENT AND PROGRAMS ADOPTED/ADAPTED

SES	Reading Test	Math Test	Reading Programs	Math Programs
Low				
Cost per student	0.104	-0.286	0.156	0.082
Salary per instructor	0.132	-0.738*	0.115	0.412
Students per instructor	-0.187	-0.296	0.167	-0.216
Percent Enrolled Students in Program	-0.566*	-0.048	—**	—**
Middle				
Cost per student	0.007	0.335	-0.043	—**
Salary per instructor	0.070	-0.011	0.387	—**
Students per instructor	0.075	-0.132	0.344	—**
Percent Enrolled Students in Program	-0.465*	-0.159	—**	—**
High				
Cost per student	0.200	—***	0.707	—***
Salary per instructor	0.200	—***	0.001	—***
Students per instructor	0.300	—***	-0.353	—***
Percent Enrolled Students in Program	0.600	—***	—**	—***

*significant $p < .05$

**There was no variation in the number of programs adopted/adapted

***There was not a sufficient sample size to analyze the relationships (n=2)

Although in some instances, the correlation coefficients were relatively large in magnitude, they were not significant ($p<.05$) because of the small sample sizes.

There were not significant relationships for any of the SES groupings, except for achievement vs. percent of enrollment participating in the program (for the low and middle SES groups). Based on these results there was no relation between Title I programs and educational achievement or disseminated programs adopted/adapted for the seventh grade.

Only 19 LEAs (4.6% of the 411 LEAs who participated in Language Experience programs) tested students in grades 10 and 12 and served these students with Title I programs. Therefore, there was not a sufficient number of LEAs per SES group to analyze the relationship.

Computational Skills

Computational Skills programs were utilized in 156 (33.8%) of the Title I LEAs. In total, 18,381 public school students, 2,455 non-public students and 123 N&D students (20,959 students in total or 20.2% of the total Title I students) participated in Computational Skills programs, at a total expenditure of $5,231,000. The students were instructed by a staff of 462 professionals and 567 non-professionals, or an average of 45.37 students per professional staff person and 36.96 students per non-professional staff person. The cost of the program per pupil was $249.58. In total, $3,568,000 was spent on

salaries for the Computational Skills program or $3,468 per staff person.

Table 8 presents this descriptive information for Computational Skills programs by SES grouping.

To assess interconnections between ESEA Title I involvement, educational achievement, and mathematics projects adopted/adapted, certain correlational relationships were analyzed. The program dissemination criterion was the number of mathematics programs adopted/adapted by the LEAs.

The educational achievement criteria was based on an aggregated score from the New Jersey Educational Assessment Program's 1975 Statewide mathematics instrument. This instrument was administered to all public school students in grades 4, 7, 10 and 12 in October, 1975. The instruments are criterion referenced tests measuring basic skill concepts in mathematics.

The Title I variables analyzed were cost of computational skills program per student, average instructional salary, number of students per instructional staff, and percent Title I participants (of the total district enrollment).

Because of the relationship between socioeconomic status and educational achievement, all analyses were performed by SES grouping. Further, not all districts have a fourth, seventh, tenth, and twelfth grade. Additionally, most of the Title I districts did not service students in all grades (kindergarten through twelve). Therefore, the

TABLE 8

Computational Skills Participation, Staffing and Cost

SES	Public Students	Non-Public Students	ND Students	Total Students	Cost	Prof. Staff	Non-Prof. Staff	Cost Per Student	Students Per Prof. Staff	Students per non-prof. Staff	Salary	Salary Per Staff Member
Low	12,612	1,793	103	14,508	$3,811,000	214	312	$262.68	67.79	46.50	$2,579,000	$4,903.04
Middle	3,498	423	20	3,941	858,000	146	198	217.71	26.99	19.90	650,000	1,889.53
High	1,898	222	0	2,120	481,000	91	48	226.89	23.30	44.17	266,000	1,913.67
Voc.	140	16	0	156	50,000	2	6	320.51	78.00	26.00	44,000	5,500.00
No SES	233	1	0	234	31,000	9	3	132.48	26.00	78.00	29,000	2,416.67
Total	18,381	2,455	123	20,959	5,231,000	462	567	249.58	45.37	36.96	3,568,000	3,467.44

SES	Percent of Public Participants	Percent of Non-Public Participants	Percent of N&D Participants	Percent of Total Participants
LOW	18.7%	22.5%	23.2%	19.1%
MIDDLE	21.9	24.3	12.7	22.0
HIGH	26.3	27.6	0.0	26.2
VOCATIONAL	24.5	43.2	0.0	25.6
NO SES	22.6	3.1	0.0	21.5
TOTAL	19.9	23.2	17.9	20.2

analyses were performed only for those districts having the particular grade and servicing that grade in its ESEA Title I program.

There were 127 LEAs (81.4% of the 156 LEAs who participated in Computational Skills program) who administered the fourth grade 1975 NJEAP mathematics instrument and administered Title I Computational Skills programs to students in grade four.

The correlations for grade 4 Computational Skills programs for each SES level are included in Table 6 with the results for Language Experiences programs.

For the low SES districts, the NJEAP average district result was significantly negatively correlated ($p<.05$) with the student-teacher ratio, and with the percent of enrolled student participants in the program; no other correlation was significant[7]. For the middle and high SES groups of districts, whereas the NJEAP reading, there existed a significant relation with salary per instructor and students per instructor, there is no significant relations between NJEAP math and Title I variables.

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[7]Although the correlation between NJEAP reading and cost per student (-0.172) is significant and the correlation between NJEAP mathematics and cost per student (-0.203) is greater in absolute magnitude, it does not necessarily follow that that correlation be significant (at the same level). The significance of the correlation coefficient is a function of the sample size. For a smaller sample size, a larger correlation coefficient is necessary to be significant. the correlation for NJEAP reading is based on a larger sample size than for NJEAP math. Hence, to obtain a significant correlation, a larger coefficient is needed for math than for reading.

There did exist relationships between the number of mathematics programs adopted/adapted and Title I. For the middle SES groups of districts, there were strong positive relationships ($p<.01$) with salary per instructor and students per instructor. For the high SES group, there was a strong negative relationship with the cost per student. However, these results concerning relationships with programs adopted/adapted should be used judiciously. The variability of programs adopted/adapted among districts is not large. (Low SES mean = 0.195; standard deviation 0.459; middle SES mean = 0.041; s.d. = 0.200; high SES mean = 0.10; s.d. = 0.305). Therefore, these correlations may be spurious.

The low SES finding of a negative relationship between NJEAP math and students per instructor was also discovered for NJEAP reading for middle and high SES groups. Those districts for which there were a smaller number of instructors per student, achieved at a higher level.

There were 27 LEAs (17.4% of the 156 LEAs with Computational Skills programs) who both administered the seventh grade 1975 NJEAP and had Title I programs in that grade. The correlational results concerning ESEA Title I, educational achievement and programs adopted/adapted are presented with similar information for Language Experience in Table 7.

There was no results for the high SES group because only two LEAs were in that category. For the middle SES group, there were no results for correlations concerning program adoption/adaption because there was no variability among LEAs in number of adoptions/adaptions.

The only significant correlation for any of the SES groups concerned the NJEAP and the average salary per Title I instructor. This result indicated that the better performing LEAs were those with a smaller average Title I instructor salary. This may indicate (especially with the negative correlation between pupil-teacher ratio and NJEAP) that the better performing LEAs are those with a greater number of instructors.

Only 9 LEAs (5.8% of the 156 LEAs participating in Computational Skills programs) tested students in tenth and twelfth grade and administered Title I programs to those students. There was not a sufficient number of LEAs per SES group to analyze the relationships.

Pre Kindergarten/Kindergarten

Title I programs for Pre Kindergarten/Kindergarten were initiated in 137 (29.1%) of the 462 participating LEAs. A total of 15,005 children (14342 public, 656 non public and 7 N&D) were serviced by 594 professional staff members and 619 nonprofessional staff members (25.26 students per professional staff person and 24.24 students per non-professional staff person). In total

the projects cost $5,815,000 of which $3,948,000 was used for salaries. ($3,255 per instructional staff person). A total of 14.5% of the Title I students participated in these programs. Table 9 presents pertinent descriptive information by SES.

Non-Standard English

Non-standard English programs were funded for 68 (14.7%) of the Title I LEAs. In total 11,969 students (8.7% of the Title I students) were served by 241 professional and 209 non-professional staff members (49.66 students per professional staff member and 57.27 students per non-professional staff person). The total cost of the project was $3,713,000. Of this total $2,407,000 was spent for salaries ($5,348.89 per instructional person). The NSE information is presented in Table 10.

An additional facet of the study concerned an examination of the relationship between each district's ESEA Title I per pupil expenditures and its total budget per pupil expenditure.

Overall, there was no significant correlation ($p<.05$) between Title I per pupil expenditures and the total per pupil expenditures ($r=0.002$). Observing the relationship by SES groups, it was also determined that for the middle SES group ($r=-0.001$) and high SES group (-0.106), the correlations were not significant ($p<.05$). However, for the low SES group there was a significant positive correlation ($p<.01$, $r=-.227$) between the two types of expenditures.

TABLE 9

Pre-Kindergarten/Kindergarten Participation, Staffing and Cost

SES	Public Students	Non-Public Students	ND Students	Total Students	Cost	Prof. Staff	Non-Prof. Staff	Cost Per Student	Students Per Prof. Staff	Students per non-prof. Staff	Salary	Salary Per Staff Member
Low	10,676	466	0	11,142	$4,293,000	363	474	$385.30	30.69	23.51	$2,854,000	$3,409.80
Middle	2,077	126	7	2,210	933,000	116	79	422.17	19.05	27.97	618,000	3,169.23
High	1,519	64	0	1,583	563,000	108	60	355.65	14.66	26.38	458,000	2,726.19
Voc.	0	0	0	0	0	0	0	0	0	0	0	0
No SES	70	0	0	70	26,000	7	6	371.43	10	11.67	18,000	1,384.62
Total	14,342	656	7	15,005	5,815,000	594	619	387.54	25.26	24.24	3,948,000	3,254.74

SES	Percent of Public Participants	Percent of Non-Public Participants	Percent of N&D Participants	Percent of Total Participants
LOW	15.8%	5.8%	0.0%	14.7%
MIDDLE	13.0	7.2	4.4	12.3
HIGH	21.2	8.0	0.0	19.6
VOCATIONAL	0.0	0.0	0.0	0.0
NO SES	6.8	0.0	0.0	6.4
TOTAL	15.6	6.2	1.0	14.5

TABLE 10

Non-Standard English Participation, Staffing and Cost

SES	Public Students	Non-Public Students	ND Students	Total Students	Cost	Prof. Staff	Non-Prof. Staff	Cost Per Student	Students Per Prof. Staff	Students per non-prof Staff	Salary	Salary Per Staff Member
Low	7,932	2,788	137	10,857	$3,533,000	220	203	$325.41	49.35	53.49	$2,262,000	$5,347.52
Middle	171	603	0	774	161,000	15	6	208.01	51.60	129.00	129,000	6,142.86
High	53	205	0	258	18,000	6	0	69.77	43.00	0	15,500	2,583.33
Voc.	0	0	0	0	0	0	0	0	0	0	0	0
No SES	3	77	0	80	1,000	0	0	11.25	0	0	0	0
Total	8,159	3,673	137	11,969	3,713,000	241	209	308.71	49.66	57.27	2,407,000	5,348.89

SES	Percent of Public Participants	Percent of Non-Public Participants	Percent of N&D Participants	Percent of Total Participants
LOW	11.8%	8.1%	30.9%	11.5%
MIDDLE	1.1	0.4	0.0	1.0
HIGH	0.7	0.4	0.0	0.7
VOCATIONAL	0.0	0.0	0.0	0.0
NO SES	0.3	0.0	0.0	0.3
TOTAL	8.8	6.2	19.9	8.7

B. School

For the academic year 1975-76 there were 3,300 elementary and secondary schools in New Jersey (2,464 public and 838 non-public). Of this total, 1,557 (47.2%) participated in ESEA Title I programs.

Individualized schools have not been classified according to socioeconomic status; however, by assuming a homogeneity of SES throughout a school district, SES levels and community type levels can be assigned to each school. In this manner it was determined that 298 schools (19.1%) were from high SES LEAs; 521 schools (33.5%) were from middle SES LEAs; 676 schools (43.4%) from low SES LEAs; 12 schools (0.8%) were from Vocational-Technical LEAs; and 50 schools (3.2%) were from LEAs with no socioeconomic status level.

Of the 1557 schools participating in ESEA Title I, 1413 (90.8%) administered Language Experience programs, 508 (32.6%) Computational Skills programs, 530 (34.0%) Kindergarten/Pre-Kindergarten programs, and 362 (23.3%) NSE programs. Of the schools participating in Language Experience and Computational Skills programs, 465 schools administered both programs, 948 only Language Experience, and 43 only Computational Skills. Table 11 presents information concerning the number of schools in each SES category who participated in each of the four ESEA Title I programs.

TABLE 11

Number of Schools Per Program by SES[1]

SES	Language Experience	Computational Skills	Non-Standard English	Pre-Kindergarten Kindergarten
Low	646 (45.7%)	240 (47.3%)	313 (86.4%)	241 (45.5%)
Middle	474 (33.8%)	159 (31.3%)	32 (8.8%)	157 (29.6%)
High	236 (16.7%)	94 (18.5%)	17 (4.7%)	123 (23.2%)
Vocational	12 (0.9%)	4 (0.8%)	0 (0.0%)	3 (0.6%)
No SES	45 (3.2%)	11 (2.2%)	0 (0.0%)	6 (1.1%)
Total	1413	508	362	530

[1]The percentages in the table refer to the percentage of those schools participating in each program (e.g., 45.7% of all schools participating in Language Experience Programs were from low SES districts.)

The school-wide information obtainable for each of the four programs concerned numbers of students participating, number of professional and non-professional staff, number of days the program was in operation, when the programs was in operation (during school hours and/or after), and the number of minutes per student per week.

From this information, it was then possible to obtain, for each program, an average student-staff ratio, an average minutes per week per instructor and finally an average minutes per week per student per instructor. This information (obtained for each program) was then correlated with NJEAP fourth and seventh grade 1975 aggregated school results to assess pertinent relationships (there were not enough schools for which the NJEAP was administered and programs offered in tenth or twelfth grades to obtain meaningful relationships). Again, because of the effect of socioeconomic status, these analyses were performed according to SES group.

It was not feasible to analyze relationships concerning programs adopted/adapted because the variability between schools concerning number of adoptions was very small.

The remainder of the results for this section will be analyzed by program.

Language Experience

There were 1407 schools (99.6% of the schools participating in Language Experience programs) whose programs were administered during school hours. On the average the

programs were administered 4.65 days per week. Each participating student had 148.54 minutes of ESEA Title I instruction per week; while the average time per week per student per staff member was 53.76 minutes. The average pupil-staff member ratio was 24.02 students per staff member. This information by SES group, is presented in Table 12.

Table 13 presents the correlation coefficients between selected ESEA Title I variables and 1975 NJEAP reading results for each SES grouping. For all three SES categories, there was a significant negative correlation between achievement and number of students per instructor. This relationship indicates that for those schools having a smaller ratio (i.e., more instructors per student), the average educational achievement level was higher. This result supports similar results found in the district wide comparisons.

Additional significant results ($p<.01$) were present for the low SES group between achievement and minutes per week per student per instructor and minutes per week per student ($p<.01$). The correlations indicated that 1) for these low socioeconomic schools, more instructional time for each student per instructor was related to a higher average achievement level; and 2) the poorer performing students were receiving more instructional time. These results were not present for the middle or high SES groups for fourth grade.

SES	Average Days Per Week of Program	Average Minutes per Week per Student	Average Students per Instructor	Average Minutes per Week per Student per Instructor
Low	4.79	162.10	29.34	46.37
Middle	4.51	128.81	17.28	55.96
High	4.54	149.88	16.19	75.74
Vocational	5.00	199.17	24.13	79.67
No SES	4.56	145.18	11.24	93.33
Total	4.65	148.54	24.02	53.76

TABLE 12

LANGUAGE EXPERIENCE SCHOOL INFORMATION

TABLE 13

FOURTH GRADE SCHOOL CORRELATIONS OF ESEA TITLE I AND EDUCATIONAL ACHIEVEMENT

SES	Reading Test	Math Test
Low		
Students per instructor	-0.254**	-0.251**
Minutes per week per student per instructor	0.422**	0.236**
Minutes per student per week	-0.194**	-0.421**
Middle		
Students per instructor	-0.247**	-0.089
Minutes per week per student per instructor	0.123	0.188
Minutes per student per week	-0.116	-0.061
High		
Students per instructor	-0.289*	-0.401*
Minutes per week per student per instructor	-0.103	-0.365*
Minutes per student per week	-0.194	-0.365*

* significant $p<.05$
** significant $p<.01$

Table 14 presents the same correlational relationships for those schools administering the seventh grade 1975 NJEAP and servicing students with ESEA Title I programs in that grade. The only significant relation ($p<.01$) for seventh grade concerned student-instructor ratio and achievement for the low SES groups of schools. Similar to other results obtained, a smaller student-staff ratio was related to a higher reading achievement level. No other significant relationship existed.

Computational Skills

Students in Computational Skills programs received instruction on an average of 4.63 days per week for 157.05 minutes per week. There were 14.22 pupils per staff person and the mean time for each student per instructor was 57.32 minutes per week. Table 15 presents this information by SES groups.

The correlations between Title I information and fourth grade mathematics achievement appears in Table 13, along with similar data for Language Experience.

The results for mathematics resemble those for reading. For the low SES group, there was a strong negative correlation ($p<.01$) between achievement and student-instructor ratio and achievement and minutes per student while a strong positive relationship existed ($p<.01$) between achievement and minutes per student per instructor. As for the Language Experience program, this combination of significant correlations indicate that those schools with more individualized

TABLE 14

SEVENTH GRADE CORRELATIONS OF ESEA TITLE I

AND EDUCATIONAL ACHIEVEMENT

SES	Reading Test	Math Test
Low		
Students per instructor	-0.709**	-0.714**
Minutes per week per student per instructor	-0.141	0.004
Minutes per student per week	0.165	0.143
Middle		
Students per instructor	-0.409	-0.517
Minutes per week per student per instructor	0.292	0.617
Minutes per student per week	-0.129	-0.168
High		
Students per instructor	-0.200	—
Minutes per week per student per instructor	-0.738	—
Minutes per student per week	-0.738	—

* significant $p<.05$
** significant $p<.01$

SES	Average Days Per Week of Program	Average Minutes per Week per Student	Average Students per Instructor	Average Minutes per Week per Student per Instructor
Low	4.71	170.92	14.74	51.14
Middle	4.44	131.68	12.60	60.23
High	4.66	152.82	14.59	87.33
Vocational	5.00	210.00	19.33	93.33
No SES	4.55	136.82	9.43	71.67
Total	4.63	157.05	14.22	57.32

TABLE 15

COMPUTATIONAL SKILLS SCHOOL INFORMATION

attention for a longer period of time were the schools in which the students performed best on the mathematics test.

There were no significant correlations for the middle SES group. For the high socioeconomic group, there were significant ($p<.05$) negative correlations for all the relationships with achievement. The negative correlation for time of instruction per week with achievement indicates that the better performing schools are administering the Computational Skills program for a lesser amount of time; or conversely, those schools which need the Title I instruction most (i.e., poorest average achieving schools), are administering the program, on the average, for a longer amount of time.

Table 14 presents the same correlations for seventh grade mathematics achievement. Because of small sample sizes, the Spearman rank-order correlation coefficient was used. Further, because of small sample sizes, correlations could not be calculated for the high SES group.

The only significant relationship ($p<.01$) was a negative correlation between NJEAP math and students per staff person for the low SES group.

Non-Standard English

Of the 362 schools participating in Non-Standard English programs, 348 (96.1%) administered their program during

school hours. Overall, NSE programs were administered 4.72 days per week, during which students spent 169.66 minutes per week in NSE programs and the average time per student per staff member was 53.20 minutes per week. There were 21.36 students per staff member in NSE programs. Table 16 presents this information, by SES group.

Pre-Kindergarten/Kindergarten

There were 530 schools who participated in Pre-Kindergarten/Kindergarten programs. Of this total, 526 (99.2%) administered their program during school hours. Information, by SES, pertaining to the Pre-Kindergarten/Kindergarten programs is presented in Table 17.

In general, these programs were administered 4.75 days per week. Each child received an average of 257.27 minutes per week of instruction (or 80.56 minutes per week for each student per instructor). There were 8.78 students per staff member.

SES	Average Days Per Week of Program	Average Minutes per Week per Student	Average Students per Instructor	Average Minutes per Week per Student per Instructor
Low	4.93	173.60	22.22	49.51
Middle	3.22	127.66	8.50	95.00
High	3.82	179.12	6.11	167.17
Vocational	0	0	0	0
No SES	0	0	0	0
Total	4.72	169.66	21.36	53.20

TABLE 16

NON-STANDARD ENGLISH SCHOOL INFORMATION

SES	Average Days Per Week of Program	Average Minutes per Week per Student	Average Students per Instructor	Average Minutes per Week per Student per Instructor
Low	4.85	321.76	8.31	69.22
Middle	4.58	197.60	9.29	93.69
High	4.76	212.93	10.77	118.51
Vocational	6.00	105.00	4.44	35.00
No SES	4.00	225.00	5.00	103.85
Total	4.75	257.27	8.78	80.56

TABLE 17

PRE-KINDERGARTEN/KINDERGARTEN SCHOOL INFORMATION

Conclusions

Certain general relationships between ESEA Title I and educational achievement were evidenced throughout the socioeconomic groupings.

Those LEAs with higher average staff Title I salaries were usually the ones with the poorer performing students in both reading and mathematics. The key to this relationship lies in the definition of a large average salary figure. If a high average salary figure represents high pay to few staff members, then it may be concluded that a small Title I staff is not effectively meeting the academic needs of the students.

The inverse relationship between achievement and student-instructor ratio strenghtens the conclusions drawn from the relationship between achievement and salary per instructor. Those LEAs with a larger ratio (i.e., less instructors to serve the students) were the poorer performing LEAs. This result when taken in context with the achievement-salary per instructor correlation, may indicate that those LEAs with a small, but well paid Title I staff, are not adequately meeting the students needs. There should be a larger staff, resulting in a smaller student-instructor ratio.

The generally positive relationship between achievement and time spent per instructor in Title I instruction indicates that those schools allotting more time per student per instructor for Title I instruction were the better performing schools. The results indicate

that perhaps more time allotted for these additional reading and mathematics programs could result in increased mastery levels for the students.

Except for isolated instances, there was no relationship between achievement and number of programs adopted/ adapted. This may, however, be an arifact of the data. There was not a large variability between achievement and number of programs, which may cause spurious correlations.

It is important to note all of the data obtainable from the ESEA Title I applications were examined; those conclusions drawn were based solely on the analysis of the available data. It is apparent that the Title I applications do not address all areas of concern for analyses of ESEA Title I for New Jersey.

This study analyzed the existing data in both a descriptive manner and a correlational manner. It must be remembered that correlation does not imply a causation, only that a relationship exists between certain entities.

APPENDIX A

1975-76 Title I District Data Sheet

Application Page			
	District Number*	_____	(1-4)
1	District Name	_____	(5-35)
	County Number*	_____	(36-37)
1	County Name	_____	(38-47)
1	Total Expenditures		
	FY 1973-74	$_____	(48-55)
	FY 1974-75	$_____	(56-63)
1	Federal Funds		
	FY 1973-74	$_____	(64-71)
	FY 1974-75	$_____	(72-79)
		1	(80)

	District Number*	_____	(1-4)
1	Average Daily Attendance		
	FY 1973-74	_____	(5-9)
	FY 1974-75	_____	(10-14)
1	Preliminary Allocation	$_____	(15-22)
1	Amount of Request	$_____	(23-30)
1	Title I Participants		
	Public	_____	(31-35)
	Nonpublic	_____	(36-40)
	N&D	_____	(41-45)
1	Language Experience		
	Grade Levels**	_____	(46-47)
	Public	_____	(48-52)

Nonpublic _____(53-57)

N&D _____(58-62)

Total _____(63-67)

Full Prof _____(68-70)

Part Prof _____(71-73)

Full Non-prof _____(74-76)

Part Non-prof _____(77-79)

2 (80)

District Number* _____ (1-4)

Cost $_____ (5-12)

1 Non Standard English

Grade Levels** ___|___(13-14)

Public _____(15-19)

Nonpublic _____(20-24)

N&D _____(25-29)

Total _____(30-34)

Full Prof _____(35-37)

Part Prof _____(38-40)

Full Non-prof _____(41-43)

Part Non-prof _____(44-46)

Cost $_____(47-54)

1 Computational Skills

Grade Levels** ___|___(55-56)

Public _____(57-61)

Nonpublic _____(62-66)

N&D _____(67-71)

Total _____(72-76)

Full Prof _____(77-79)

3 (80)

District Number** _____ (1-4)

Part Prof _____ (5-7)

Full Non-prof _____ (8-10)

Part Non-prof _____(11-13)

Cost $_____(14-21)

1 Pre-K/Kindergarten

Grade Levels** ___|___(22-23)

Public _____(24-28)

Nonpublic _____(29-33)

N&D _____(34-38)

Total _____(39-43)

Full Prof _____(44-46)

Part Prof _____(47-49)

Full Non-prof _____(50-52)

Part Non-prof _____(53-55)

Cost $_____(56-63)

1 Cooperative Program (1=yes, 2=no) _____ (64)

Add #1.1 District Number of Participating Districts* (B) _____(65-68)
(only if Cooperative Program is checked yes) (C) _____(69-72)

Add #1.1 Number of Participants in each District (A) _____(73-77)
(only if Cooperative Program is checked yes)

4 (80)

District Number* _____ (1-4)

A #1.1 Number of Participants (B) _____ (5-9)
(C) _____(10-14)

Add #1.1 Amount of Funds

(A) $_____ (15-22)
(B) $_____ (23-30)
(C) $_____ (31-38)

1 Total Allocation

Preliminary $_____ (39-46)

Final $_____ (47-54)

1 Total Requested

Preliminary $_____ (55-62)

Final $_____ (63-70)

1 Total Approved

Preliminary $_____ (71-78)

5 (80)

District Number** _____ (1-4)

Total Approved

Final $_____ (5-12)

4 Enrolled in Public Schools own School District

Grade Span** ___|___ (13-14)

Number schools _____ (15-16)

Number of Residing Children _____ (17-21)

Other School District(s)

Grade Span** _____ (22-23)

Number of Residing Children _____ (24-28)

4 Enrolled in Private Schools own School District

Grade Span** ___|___ (29-30)

Number of Schools _____ (31-32)

Number of Residing Children _____ (33-37)

	Other School District(s)	
	Number of Residing Children	_____(38-42)
4	Neglected and Delinquent	
	Grade Span**	___|___(43-44)
	Number of Schools	_____(45-46)
	Number of Residing Students	_____(47-51)
4	Not Enrolled but Eligible	_____(52-56)
4	Data Source/Low Income (1 if checked; 0 if not checked)	
	Aid for Dependent Children	_____ (57)
	Free School Lunch	_____ (58)
	School Survey	_____ (59)
	Health Statistics	_____ (60)
	Housing Statistics	_____ (61)
	Employment Statistics	_____ (62)
	U.S. Census	_____ (63)
	Other	_____ (64)
5	Total Number of Attendance Areas	_____(65-66)
5	Total Children from Low Income Families	_____(67-71)
11	Number Eligible Public	_____(72-76)
		6 (80)

	District Number**	_____ (1-4)
11	Number Eligible Nonpublic	_____ (5-9)
	N&D	_____(10-14)
12	NSE	
	Public	_____(15-19)
	Nonpublic	_____(20-24)
	N&D	_____(25-29)

29	Number of Different Types of Supportive Services	_____	(30-31)
	Total Public	_____	(32-36)
	Total Nonpublic	_____	(37-41)
	Total N&D	_____	(42-46)
35	Combinations of Fiscal Data (1=yes, 2=no)		
	Reg, A, Realloc	_____	(47)
	Reg, A, Carry	_____	(48)
	Reg, A, Current	_____	(49)
	Reg, B, Realloc	_____	(50)
	Reg, B. Carry	_____	(51)
	Summer, A, Reall	_____	(52)
	Summer, A, Carry	_____	(53)
	Summer, A, Current	_____	(54)
	Summer, B, Realloc	_____	(55)
	Summer, B, Carry	_____	(56)
	Total, A, Kealloc	_____	(57)
	Total, A, Carry	_____	(58)
	Total, A, Current	_____	(59)
	Total, B, Realloc	_____	(60)
	Total, B, Carry	_____	(61)
	Total, B. Current	_____	(62)
37	Budget Breakdown (Part A)		
	Line 100 Administration	$_____	(63-70)
	Line 200 Instruction	$_____	(71-78)
		7	(80)

District Number*	_____	(1-4)

	Line 600 Operation	$_____ (5-12)
	Line 700 Maintenance	$_____ (13-20)
	Line 800 Fixed Charges	$_____ (21-28)
	Line 1000 Student Activities	$_____ (29-36)
	Line 1100 Other Expenses	$_____ (37-44)
37	Salaries (line 200)	
	Language experience	$_____ (45-52)
	NSE	$_____ (53-60)
	Computational Skills	$_____ (61-68)
	Pre-Kind/Kind	$_____ (69-76)
		8 (80)

	District Number**	_____ (1-4)
Add #2.1	Number of N&D Institutions	_____ (5-6)
	Total Number of Children	_____ (7-10)
	Public	_____ (11-14)
	Private	_____ (15-18)
	Institutional	_____ (19-22)
	Dropouts	_____ (23-26)
	Participation (Total)	
	Pre K	_____ (27-30)
	K	_____ (31-34)
	1-6	_____ (35-38)
	7-12	_____ (39-42)
	Dropouts	_____ (43-46)
Add #2.1	Total number of non-professionals	_____ (47-48)
	Total Staff	_____ (49-51)

Add #4.1 Pre-School

Number participants _____(52-56)

N&D Participants _____(57-61)

Add #4.1 Kindergarten

Public _____(62-66)

Nonpublic _____(67-71)

N&D _____(72-76)

9 (80)

District Number* _____ (1-4)

A (80)

Language Experience

P 11

		District Standard	Eligible Students	Above Standard	Below Standard	NSE	Eligible to participate	Selected to participate	
01 (5-6)	1								(7-34)
	2								(35-62)
02 (5-6)	3								(7-34)
	4								(35-62)
03 (5-6)	5								(7-34)
	6								(35-62)
04 (5-6)	7								(7-34)
	8								(35-62)
05 (5-6)	9								(7-34)
	10								(35-62)
06 (5-6)	11								(7-34)
	12								(35-62)

District Number* _____ (1-4)

B (80)

P12

		Standard Level	Above Standard	Below Standard	Selected	
01 (5-6)	1					(7-22)
	2					(23-38)
	3					(39-54)
	4					(55-70)
02 (5-6)	5					(7-22)
	6					(23-38)
	7					(39-54)
	8					(55-70)
03 (5-6)	9					(7-22)
	10					(23-38)
	11					(39-54)
	12					(55-70)

District Number _____ (1-4)

C (80)

Computational Skills

Add #3.1

		District Standard	Above Standard	Below Standard	NSE	Participants	
01 (5-6)	1						(7-26)
	2						(27-46)
	3						(47-66)
02 (5-6)	4						(7-26)
	5						(27-46)
	6						(47-66)
03 (5-6)	7						(7-26)
	8						(27-46)
	9						(47-66)
04 (5-6)	10						(7-26)
	11						(27-46)
	12						(47-66)

80

81

1975-76 Title I School Data Sheet

(one must be completed for each school within the district).

Application page				
	District Number*		_____	(1-4)
	School Number*		_____	(5-7)
	School Name	_____		(8-39)
P. 13	Unduplicated Participants			
		PK	_____	(40-43)
		K	_____	(44-47)
		1	_____	(48-51)
		2	_____	(52-55)
		3	_____	(56-59)
		4	_____	(60-63)
		5	_____	(64-67)
		6	_____	(68-71)
		7	_____	(72-75)
		8	_____	(76-79)
			X	(80)
	District Number*		_____	(1-4)
	School Number*		_____	(5-7)
P. 13	Unduplicated Participants	9	_____	(8-11)
		10	_____	(12-15)
		11	_____	(16-19)
		12	_____	(20-23)
P. 23	Professional Staff		_____	(24-26)
	Nonprofessional Staff		_____	(27-29)

Participating Children

Public _____(30-33)

Nonpublic _____(34-37)

N&D _____(38-40)

Number of Days Project in Operation _____ (41)

During School Hours (1=yes, 2=no) _____ (42)

Other Hours (1=yes, 2=no) _____ (43)

Minutes/students/week (convert to minutes) _____(44-46)

P. 27 NSE

Number Professional Staff _____(47-49)

Non-professional Staff _____(50-52)

Participating Children

Public _____(53-56)

Nonpublic _____(57-60)

N&D _____(61-63)

Days Project in Operation _____ (64)

During School Hours _____ (65)

Other Hours _____ (66)

Minutes/students _____(67-69)

Add 3.7 Computational Skills

Professional Staff _____(70-72)

Non-professional Staff _____(73-75)

Public Participants _____(76-79)

Y (80)

District Number* _____ (1-4)

School Number* _____ (5-7)

Nonpublic _____ (8-11)

N&D _____(12-14)

Days of Week _____ (15)

During School Hours _____ (16)

Other Hours _____ (17)

Minutes/student _____ (18-20)

Add 4.4 Pre K/Kindergarten

Number of Professionals _____ (21-23)

Non-professionals _____ (24-26)

Public _____ (27-30)

Nonpublic _____ (31-34)

N&D _____ (35-37)

Days of Week _____ (38)

During School Hours _____ (39)

Other Hours _____ (40)

Minutes/student _____ (41-43)

Z (80)

Instructions for Title I Data Collection

1. District number is a four digit number to be obtained from the computer printouts (Add leading zeros if the number is less than four digits).

2. School number is a three digit number obtained in the same manner as district code.

3. County Code - use the following codes:

Atlantic -	01
Bergen -	03
Burlington -	05
Camden -	07
Cape May -	09
Cumberland -	11
Essex -	13
Gloucester -	15
Hudson -	17
Hunterdon -	19
Mercer -	21
Middlesex -	23
Monmouth -	25
Morris -	27
Ocean -	29
Passaic -	31
Salem -	33
Somerset -	35
Sussex -	37
Union -	39
Warren -	41

4. Round all numbers to nearest whole number.

5. Use the following code for Grade level

P	- pre kindergarten
K	- kindergarten
1-9	- 1st to 9th grade
A	- 10th grade
B	- 11th grade
C	- 12th grade

For all items marked Grade Level, record the code for the lowest grade level and the code for the highest grade. For example, if the Grade levels are 2,3,4, and 10, use the following code

Grade Level **	2	A

6. On page 6, for the number of different types of supportive services, you will have to count the number of types of services, and place that number on the sheet.

7. For the Budget breakdown on Page 6 and 7, use only Part A budget

8. In the school data sheet, page 2 and 3, for the entry marked Minutes/Student, if the data in the Title I application is not given in minutes, you must convert the time to minutes.

APPENDIX B

COMMUNITY-TYPES

- Urban Center (UC) - densely populated with extensive development.
- Urban-Suburban (US) - near an urban center but not as highly developed, with larger residential areas.
- Suburban (S) - predominantly single family residential with a short distance of an urban area.
- Suburban-Rural (SR) - rapidly developing area, but still large tracts of open land available for development.
- Rural (R) - scattered small communities and isolated single-family dwellings.
- Rural Center (RC) - highly density core area with surrounding rural municipalities.
- Rural Center Rural (RCR) - small developed core area surrounded by rural areas.
- Vocational (V) - primary emphasis on vocational training under a separate educational jurisdiction.
- Regional District (R) - an educational jurisdiction established to serve several surrounding communities.